Transportation Safety Board of Canada

Departmental Performance Report

For the period ending
March 31, 2008

Wendy A. Tadros
Chair
Transportation Safety Board of Canada

Josée Verner
President
Queen's Privy Council for Canada

Canada

Table of Contents

Section 1: Overview 1

1.1 Chair's Message 1
1.2 Management Representation Statement 3
1.3 Summary Information 3
1.3.1 Raison d'être 3
1.3.2 Operating Framework 4
1.3.3 Risks and Challenges 5
1.3.4 Resources 8
1.3.5 Program Activity Architecture 8
1.3.6 TSB Priorities 9
1.4 Performance against Priorities 10

Section 2: Analysis of Program Activity 13

2.1 Performance Management Framework 13
2.2 Performance Measurement Table 13
2.3 TSB Resources by Sector 14
2.4 Occurrences Reported to the TSB 15
2.5 Investigations Started, in Process and Completed 16
2.6 Safety Communications Issued 18
2.7 Communicating Transportation Safety to Canadians and the Transportation Community 18
2.8 Marine Sector 19
2.8.1 Occurrences and Accident Rates 19
2.8.2 Investigations and Safety Communications 21
2.8.3 Safety Actions Taken 22
2.8.4 Link to Resources Utilized 22
2.9 Pipeline Sector 23
2.9.1 Occurrences and Accident Rates 23
2.9.2 Investigations and Safety Communications 25
2.9.3 Safety Actions Taken 26
2.9.4 Link to Resources Utilized 26
2.10 Rail Sector 27
2.10.1 Occurrences and Accident Rates 27
2.10.2 Investigations and Safety Communications 29
2.10.3 Safety Actions Taken 29
2.10.4 Link to Resources Utilized 29
2.11 Air Sector 30
2.11.1 Occurrences and Accident Rates 30
2.11.2 Investigations and Safety Communications 32
2.11.3 Safety Actions Taken 33
2.11.4 Link to Resources Utilized 33

Section 3: Supplementary Information 35
3.1 Departmental Link to Government of Canada Outcome Areas 35
3.2 Financial Information 35
3.3 Other Information 37
3.4 TSB Information and Contacts 38

Appendices 39
Appendix A – Glossary 40
Appendix B – Links to Other Organizations Involved in Transportation Safety 41
Appendix C – Audited Financial Statements 42

List of Figures and Tables

Figures

Figure 1 – Occurrences Reported to the TSB 16
Figure 2 – Investigations Started, in Process and Completed 17
Figure 3 – Marine Occurrences and Fatalities 20
Figure 4 – Canadian-Flag Shipping Accident Rates 21
Figure 5 – Pipeline Occurrences 24
Figure 6 – Pipeline Accident Rates 25
Figure 7 – Rail Occurrences and Fatalities 28
Figure 8 – Main-Track Accident Rates 28
Figure 9 – Air Occurrences and Fatalities 31
Figure 10 – Canadian-Registered Aircraft Accident Rates 32

Tables

Table 1 – Marine Productivity 22
Table 2 – Marine Resources 23
Table 3 – Pipeline Productivity 25
Table 4 – Pipeline Resources 26
Table 5 – Rail Productivity 29
Table 6 – Rail Resources 30
Table 7 – Air Productivity 32
Table 8 – Air Resources 34

Financial Tables

Financial Table 1 – Voted and Statutory Items 35
Financial Table 2 – Comparison of Planned to Actual Spending 37

Section 1: Overview

1.1 Chair's Message

When a marine, pipeline, rail, or aviation accident befalls in Canada, the Transportation Safety Board of Canada (TSB) stands ready to conduct a full and independent investigation. That is why TSB investigators report again and again to the scenes of accidents, often under the most challenging of conditions, be those scouring ocean floors for wreckage, working with hazardous debris or walking miles of track to recover key pieces to advance transportation safety.

When our work is done, we always tell Canadians what we learned. We report what caused the accident, what underlying safety issues there are and what needs to be done to improve the safety of our transportation system. At the TSB, we believe, in some measure, that our recommendations serve to save lives, preserve the environment and protect the property of Canadians.

To this end, the past year has been another busy year for the TSB as demonstrated in our Annual Report that was tabled last June in Parliament. We completed an increasing number of very complex investigations, some of them having a high profile, while at the same time significantly reducing the number of investigations in progress. No matter the occurrence, we acted quickly to ensure that lessons learned were made public and passed on to those persons and agencies best positioned to take effective action and make changes.

I realize that we did not fully achieve all of the objectives listed in the Report on Plans and Priorities; however, we have taken steps forward in our priority investments to implement new ways of contributing to transportation safety and strengthening the organization's internal management. We have thoroughly assessed our information technology (IT) infrastructure, and we agreed on measures to take to consolidate our acquisitions and ensure the long-time viability of our Investigation and Information Management System. We also reviewed our A-Base budget and our capital assets, and analyzed our historical financial data to ensure that we are using them optimally to achieve the desired results. We should start seeing the results of these exercises next year. I also challenged the management team at the TSB to find ways of ensuring that our recommendations are made public and communicated more rapidly to the change agents as well as improving on the uptake of our recommendations. I am happy to report that work is well underway on this initiative.

I am confident that the TSB has again this year played a strong role to ensure that Canadians will always enjoy one of the safest transportation systems in the world.

1.2 Management Representation Statement

I submit, for tabling in Parliament, the 2007-2008 Departmental Performance Report for the Transportation Safety Board of Canada.

This document has been prepared based on the reporting principles contained in the *Guide for the Preparation of Part III of the 2007-2008 Estimates: Reports on Plans and Priorities and Departmental Performance Reports*:

- It adheres to the specific reporting requirements outlined in the Treasury Board Secretariat guidance;
- It is based on the department's Strategic Outcome and Program Activity Architecture that were approved by the Treasury Board;
- It presents consistent, comprehensive, balanced and reliable information;
- It provides a basis of accountability for the results achieved with the resources and authorities entrusted to it; and
- It reports finances based on approved numbers from the Estimates and the Public Accounts of Canada.

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Wendy A. Tadros
Chair

1.3 Summary Information

1.3.1 Raison d'être

The Transportation Safety Board of Canada (TSB) is an independent agency created in 1990 by an Act of Parliament (*Canadian Transportation Accident Investigation and Safety Board Act*). It operates at arm's length from other government departments and agencies to ensure that there are no real or perceived conflicts of interest. The TSB's only objective is the advancement of transportation safety. This mandate is fulfilled by conducting independent investigations into transportation occurrences. The purpose is to identify the causes and contributing factors of the occurrences and the safety deficiencies evidenced by an occurrence. The TSB then makes recommendations to improve safety and reduce or eliminate risks to people, property and the environment.

The jurisdiction of the TSB includes all aviation, marine, rail and pipeline transportation occurrences in or over Canada that fall under federal jurisdiction. The TSB may also represent Canadian interests in foreign investigations of transportation accidents involving Canadian registered, licensed or manufactured aircraft, ships or railway rolling stock. In addition, the TSB carries out some of Canada's obligations related to transportation safety at the International Civil Aviation Organization (ICAO) and the International Maritime Organization (IMO).

A transportation occurrence is any accident or incident associated with the operation of an aircraft, ship, railway rolling stock or pipeline. It also includes any hazard that could, in the Board's judgement, induce an accident or incident if left unattended.

1.3.2 Operating Framework

The TSB is primarily funded by Parliament through a program expenditures vote and, as a departmental corporation, it has authority to spend revenues received during the year. The TSB operates within the context of Canada's very large, complex, dynamic and ever-changing transportation system. Many individuals and groups cooperate with the TSB in the fulfillment of its mandate. During the course of an investigation, the TSB interacts directly with

- individuals such as survivors, witnesses and next-of-kin;
- operators;
- other organizations and agencies such as medical examiners, police, manufacturers, owners and insurance companies; and
- other federal government departments and agencies.

Their cooperation is essential to the conduct of the TSB's business, whether they contribute information or support services. For more details on the investigation process, visit the TSB website at www.tsb.gc.ca/en/investigation_process/index.asp.

The TSB is one of many organizations involved in improving transportation safety nationally and internationally. Even if the TSB is operating at arm's length from other federal departments in the transportation field, it cannot achieve its strategic outcome without the cooperation of the other organizations. The TSB presents findings and issues recommendations in such a manner that other organizations feel compelled to act but it has no formal authority to regulate, direct or enforce specific actions. Its success implies ongoing dialogue, information sharing and strategic coordination with organizations such as Transport Canada, the National Energy Board and the Canadian Coast Guard.

The TSB must also continuously be in contact with industry and foreign regulatory organizations, and exchange information with them. Through various means, the TSB must present compelling arguments that will convince these "change agents" to take the necessary action in response to identified safety deficiencies.

The TSB has established memoranda of understanding with other federal government departments for the coordination of activities and the provision of support services. These agreements provide the TSB with access to a range of support services that can rapidly supplement internal resources. The agreements also define operating practices to ensure good coordination of activities and to avoid potential conflicts that could arise from the simultaneous implementation of various organizational mandates. Such agreements are currently in place with the Department of National Defence, the Royal Canadian Mounted Police, the Canadian Coast Guard, Human Resources and Social Development Canada, and the National Research Council. Similarly, the TSB has established strategic cooperation alliances with provincial and territorial medical examiners and with certain provincial government departments for rail occurrences that fall under their jurisdiction.

Further alliances have been established with the TSB's counterpart agencies in other countries such as the United States, Australia, the Netherlands, New Zealand, France, the United Kingdom, and the Republic of Korea. The TSB cooperates on a reciprocal basis with foreign safety investigation agencies through the ad hoc exchange of specialized services or the provision of assistance as a means of coping with capacity gaps. As one of the world leaders in its field, the TSB regularly shares its investigation techniques, methodologies and tools with other organizations. For example, the Recorder Analysis and Playback System (RAPS), originally developed by the TSB for decoding and analyzing flight data recorders (FDRs) and cockpit voice recorders (CVRs), is used by several countries. In cooperation with our partners, we are also pursuing our efforts to develop a vessel movement simulation system based on the information contained in voyage data recorders (VDRs). Similarly, the TSB has contributed to the training of investigators from numerous countries, either by integrating foreign investigators into its in-house training programs or by sending senior staff to teach abroad. The TSB also gives information and copies of its reports to sister organizations, and participates in international working groups and studies to advance transportation safety.

1.3.3 Risks and Challenges

The TSB faces many risks and challenges that have a potentially significant impact on the organization's ability to achieve its mandate. Managers are aware of these risks and challenges and are expected to take appropriate action to mitigate the risks while ensuring the delivery of their mandate. The most important challenges faced in 2007-2008 are described in the following paragraphs.

Our Capacity to Manage Workload and Priorities Within Available Resources

The TSB continues to receive many investigation requests from the public. It also faces numerous internal and external pressures to sustain existing activities and undertake new initiatives or modify existing practices to meet the central agencies' change requirements. In addition, other factors continue to have an impact on the organization's capacities, including risk mitigation measures that need to be implemented in IT security and business continuity planning.

The challenge we face includes continuing to carry out our mandate with constantly shrinking financial resources, while expectations and requirements grow and some components of our infrastructure age or no longer meet our needs. We must therefore find the right balance between the level of activity and the capacity of available human and financial resources. This means finding even more efficient ways of working, both internally and externally, and continuing to review our processes and practices, products, services and procedures to ensure that our resources are applied in the best possible way to achieve optimum results.

Maintaining a Knowledgeable and Professional Workforce

The TSB's success and credibility depend largely on the expertise, professionalism, and competence of its employees. Although TSB's workforce has traditionally been stable, like many organizations, it faces a specific workforce challenge. Many positions are "one-deep," that is, there is only one person responsible for a specific task or function. In the next few years, the TSB must continue to operate as efficiently as possible while many of its employees and managers retire and the shortage of workers in some operational support areas within the public service will not be remedied. In both the short and long term, a sustained effort is therefore required to implement a more systematic human resources planning process to obtain the skills we need and to develop succession plans and training and mentorship programs that will ensure service delivery and maintain the TSB's knowledge base and its technical expertise.

The results of the 2005 Public Service Employee Survey provided us with an up-to-date assessment of employee satisfaction and concerns. Analysis of the key elements and problems raised showed that efforts are required to respond to employee concerns in some areas including advancement opportunities, job classification, career development, and the opportunity for input into decisions. Here again, the challenge we face is to invest resources and efforts to accommodate employee concerns and the demands of all our obligations.

Maintaining an Information Technology and Physical Asset Infrastructure to Meet the Business Needs

As mentioned earlier, the TSB must balance its priorities to carry out its mandate consistently and economically while assuring stakeholder confidence in the integrity of its operations. Maintaining a reliable, sustainable infrastructure that meets our needs

regarding IT or other asset categories is essential if we wish to reach this objective. The TSB currently has close to 14 million dollars in capital assets. However, a little over one million dollars has been expended this year to replace or acquire new assets, which is not nearly enough. Thus, we are making ourselves vulnerable to major risks that could compromise our capacity to meet our needs in the longer term if we do not rapidly take steps to optimize the management of our assets and the resources allocated to them.

Transitioning the TSB Investigation and Information Management System from the Project Stage to a Work Tool

We have invested substantial time, resources, and money to develop the TSB Investigation and Information Management System to better manage our business while meeting government information management and technology requirements. To ensure the system's ongoing viability, we must use it and follow the systematic change management approach that is integrated into it. The sustained participation of investigators in managing change as we move forward is essential to guarantee compliance with the fundamental principles that are the basis of the system. We must encourage finding ways to meet our needs for investigation information using the TSB Investigation and Information Management System, and managers at all levels must discourage the introduction of independent alternatives.

We must make all the TSB Investigation and Information Management System components fully functional. This remaining work has to be done in parallel with the ongoing maintenance and change management required to ensure that the investigation management module is stable. This increases the workload of the system design team and IT staff.

Investigators and support staff also experience increased workloads because they need to participate in designing and testing other system features. Therefore, ongoing expenditures are necessary to operate and maintain the TSB Investigation and Information Management System components both from an IT perspective as well as from an operational and organizational perspective. To not meet these challenges would have a significant impact on the delivery of products and services given that we have decided to not revert to old tools and systems. Partial adoption and use of the TSB Investigation and Information Management System would result in loss of productivity and create inefficiencies in work processes.

Managing Commitments and External Expectations

Over the past few years, a number of TSB communications initiatives have raised public and stakeholder awareness of the TSB and its program. While these initiatives enabled the TSB to influence key change agents for the improvement of transportation safety, they also increased related stakeholder demands (for example, the media request live broadcasts and constantly updated information). Given our operating methods and increasingly limited resources, we must continue to ensure that our external communication products and services are available, up-to-date and of the highest quality

to retain the integrity and credibility required to fulfill our mandate. We must also expend more effort to focus our awareness activities on those safety issues for which it is necessary to obtain results.

1.3.4 Resources

The following table summarizes the total financial and human resources allocated to the TSB in 2007-2008, as well as the actual resources utilized for the delivery of the mandate. Financial tables 1 and 2 in Section 3 of this report provide detailed information on the overall financial results of the TSB and Appendix C presents the audited financial statements.

Financial Resources (in thousands of dollars)

2007-2008		
Planned Spending	**Total Authorities**	**Actual Spending**
29,350	31,546	30,440

Human Resources (full-time equivalents)

2007-2008		
Planned	**Actual**	**Difference**
235	216	19

1.3.5 Program Activity Architecture

The following table shows the TSB's Program Activity Architecture (PAA). Based on the comments provided by the Treasury Board Secretariat during its assessment of the TSB against the Management Accountability Framework, the Department revised its PAA in 2007-2008. The revised architecture was approved by the Treasury Board and will come into effect in 2008-2009. It will allow to better distinguish the TSB's strategic outcome from the one of the other organizations playing a role in the transportation field and to bring the sub-activities showed in the following table to the program activity level.

Program Activity and Sub-activity by Strategic Outcome	
Strategic Outcome	To advance transportation safety, thereby reducing risks to people, property and the environment.
Expected Result	Increased awareness of safety issues and a strengthened safety culture on the part of governments, industry and public.
Program Activity	To conduct safety investigations.
Expected Result	The timely implementation of safety actions by stakeholders to improve transportation safety for Canadians.
Sub-activities	Air Investigations Marine Investigations Rail/Pipeline Investigations
Expected Result	Identification and communication of safety deficiencies in the transportation system to stakeholders and the public.

1.3.6 TSB Priorities

In its 2007-2008 Report on Plans and Priorities, the TSB had identified five priorities. All were strategic investments aimed at enhancing the TSB's contribution to transportation safety in Canada and internationally and strengthening the organization from within.

Overall, progress was achieved against all priorities. However, not all objectives were fully achieved, due to our limited human resources capacity and events outside of our control. On many occasions throughout the year, managers were faced with the difficult choice of reallocating people from one project or investigation to another. The following table provides a quick overview of the results achieved this year against our priorities.

TSB Priorities				
TSB Priorities	**Type**	**Performance Status**	**Planned Spending** (in thousands of dollars)	**Actual Spending** (in thousands of dollars)
Continuous Improvement of Information Management	Previously committed to	Meets expectations in part	480(*)	467
Management of Workload and Priorities Within Available Resources	New	Meets expectations in part	75	59
Increased Human Resources Planning to Ensure the Retention of a Professional Workforce	Previously committed to	Meets expectations in part	100	0
Review of the Sustainability of the Infrastructure	New	Meets expectations in part	50(*)	41
Continuation of Residual 2006-2007 Priority Projects	Previously committed to	Meets entirely	95	110

(*) A supplementary amount of $33,500 was allocated to these two priority projects at mid-year.

1.4 Performance against Priorities

Continuous Improvement of Information Management

In 2006-2007, we have deployed a large part of the Investigation and Information Management System, which follows central documentation principles and allows us to collaborate and share information and employ consistent procedures and processes across all sectors.

This year, in addition to providing ongoing support services to users, we evaluated the performance of our IT infrastructure in order to ensure its long-term viability. This exercise revealed that we have to dedicate additional effort to developing our applications and our core IT processes, supporting IT operations, and developing IT personnel's skills. This is why we decided to delay most of the activities set out in this year's plan, so that we could first implement measures to lay the foundation for consolidating our

acquisitions and improve the performance of the Investigation and Information Management System. We have also nearly completed the implementation of our new Enterprise File Plan for our records.

Management of Workload and Priorities within Available Resources

To offset the impact of our shrinking resources over the years and to ensure that we are able to respond to growing public expectations as regards to investigations in light of our workload and our priorities, we have nearly completed our A-Base budget review. Once this exercise is complete, we will have a model for establishing the costs per activity of occurrence investigations and will thus be better equipped to reallocate our human and financial resources to better meet our immediate and future needs. In parallel with this work, we also reviewed the structure and processes for the management of our financial resources to ensure that we are making optimal use of them to achieve the desired results.

Increased Human Resources Planning to Ensure the Retention of a Professional Workforce

TSB's credibility and success are based largely on its capacity to build and maintain a professional workforce to ensure continuity in its operations. This fiscal year, management made enhanced human resources planning a priority in order to be able to more strategically recruit the employees it needs to fulfill its mandate and train and develop employees already in place.

No project to facilitate the transfer of knowledge from experienced to new employees has been undertaken this year. However, senior managers have decided to continue to set aside a portion of the TSB budget for this purpose against next fiscal year in anticipation of the retirement of employees in key positions.

Senior management has also continued this year to address and monitor some TSB-specific issues detailed in the 2005 Public Service Employee Survey.

Review of the Sustainability of the Infrastructure

Because of the ongoing erosion of our resources and in order to maintain our capacity to fulfill our mandate and meet future challenges, we have expanded the capital asset review launched last year. This year, we reviewed our Engineering Laboratory and associated equipment as well as the complete informatics and office equipment infrastructure. This work should be completed by the beginning of the next fiscal year, and should result in a strategic asset management framework as well as an investment plan based on the life cycle of our assets.

Continuation of Residual 2006-2007 Priority Projects

We also continued the initiatives started in 2006-2007 to improve business continuity planning. The development of our business contingency and business resumption plans is now completed. They will be implemented next fiscal year. These plans are essential to ensure the continued availability of TSB services and associated assets that are critical to the delivery of our mandate. These plans will be complemented by an ongoing governance and review process.

We have also completed the implementation of information technology security measures to achieve compliance with Treasury Board's Management of Information Technology Security standards. We have delivered security awareness training to all employees and have updated our IT Network Acceptable Use Policy. We have also completed the detailed threat and risk assessments of our network infrastructure, major IT systems and physical accommodation.

Section 2: Analysis of Program Activity

2.1 Performance Management Framework

The TSB's actual performance management framework consists of five documents. The five-year TSB Strategic Plan is used to set the strategic directions. The Report on Plans and Priorities outlines to parliamentarians and Canadians the results the organization plans to achieve with the resources entrusted to it and how it will measure its performance. The annual Business Plan states the key initiatives and activities in support of the corporate priorities. It also outlines the key priorities for each branch and division and the resource allocation decisions for the coming year. Finally, the Annual Report and the Departmental Performance Report close the accountability loop by respectively reporting to Parliament on the TSB activities, findings and recommendations and the results achieved with the resources allocated to the organization.

2.2 Performance Measurement Table

The following table shows the TSB performance measurement. It is now being revised to align it with the new organizational PAA and to meet the requirements of the Management and Results Structure Policy. The five priorities listed in Section 1.3.6 of this document are aimed at supporting and enhancing the TSB's ability to conduct safety investigations and communicate safety information.

Overview of TSB Performance Measurement Table

Program Activity Architecture Level	Definition	Results	Indicators(*)
Strategic Outcome	To advance transportation safety, thereby reducing risks to people, property and the environment	Increased awareness of safety issues and a strengthened safety culture on the part of governments, industry and public	• Implementation of the Outreach Program • Availability of safety information and other transportation safety information on the web • Stakeholder and client awareness of TSB profile and impact of its activities • Cost of Business Plan projects • Safety outputs issued • Assessment of responses to TSB recommendations

Program Activity Architecture Level	Definition	Results	Indicators[*]
	Name	**Expected Results**	
Program Activity	Safety Investigations	Timely implementation of safety actions by stakeholders to improve transportation safety for Canadians	• Cost of Business Plan projects • Timely safety actions taken
Program Sub-Activities	1. Air Investigations 2. Marine Investigations 3. Rail/Pipeline Investigations 4. Professional and Communications Services	Identification and communication to stakeholders and the public of safety deficiencies in the transportation system	• Number of transportation occurrences • Number of investigations started, in process and completed • Duration of completed investigations • Net cost of completed investigations by sector • Average net cost per investigations completed • Number of investigations started and completed by investigator • Number of safety outputs issued • Number of safety actions taken
[*] Unless otherwise specified, the data used in this report for these indicators come from the TSB information systems.			

2.3 TSB Resources by Sector

In order to optimize the use of resources and to effectively respond to its stakeholders, the TSB has four key sectors of service based on the four transportation modes included in its mandate: marine, pipeline, rail and air. This approach enables alignment with the transportation industry and the way it operates. As of 2008-2009, these sectors will become the four program activities of the organization.

Resources are therefore allocated and managed separately for each of these key service areas. The following table indicates planned and actual spending on financial and human resources for the key service areas in 2007-2008. Sections 2.8 to 2.11 provide detailed information on each key service.

TSB Resources by Sector

Financial Resources (in thousands of dollars)		
	Planned Spending	**Actual Spending***
Marine	7,103	7,405
Pipeline	576	600
Rail	6,732	7,018
Air	18,048	18,815
Total	32,458	33,839
Human Resources (FTEs)		
Marine	53	49
Pipeline	4	4
Rail	49	45
Air	128	118
Total	235	216

* Actual financial spending indicated in this table includes actual program activity expenditures plus the cost of services received without charge.

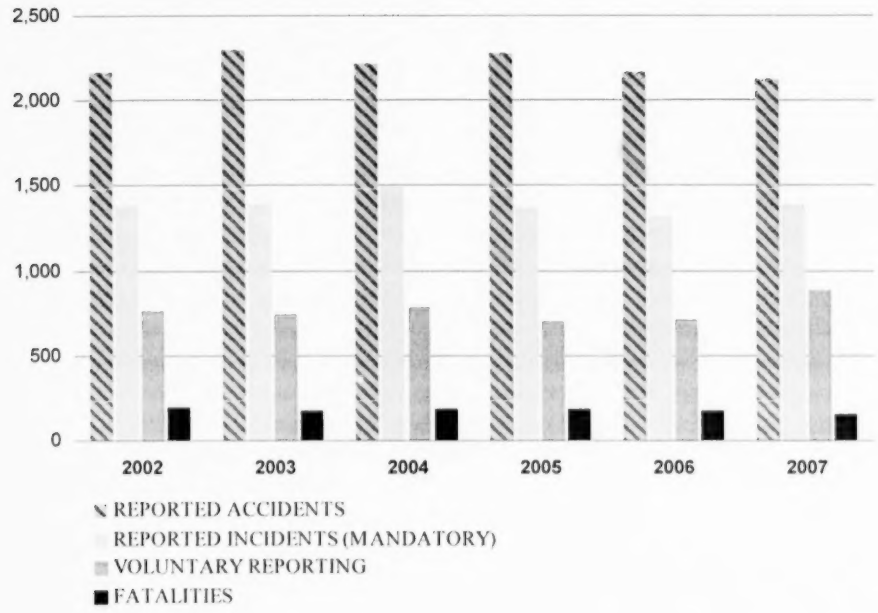
Due to rounding, numbers may not sum exactly to totals.

2.4 Occurrences Reported to the TSB

In 2007, a total of 2,119 accidents and 1,390 incidents were reported in accordance with the TSB's regulations for mandatory reporting of occurrences.[1] The number of accidents in 2007 decreased by 2 per cent from the 2,161 accidents reported in 2006 and by 5 per cent from the 2002-2006 annual average of 2,223 accidents. The number of reported incidents increased to 1,390 in 2007 from 1,325 in 2006, but decreased from the 2002-2006 average of 1,392. There were also 886 voluntary occurrence reports. Fatalities totalled 155 in 2007, down 13 from the 2006 total and 26 from the 2002-2006 average.

[1] While the Board's operations are for the 2007-2008 fiscal year, occurrence statistics are for the 2007 calendar year unless otherwise indicated. Please note that, in a live database, the occurrence data are constantly being updated. Consequently, the statistics can change slightly over time. Comparisons are generally to the last 5 or 10 years.

Figure 1: Occurrences Reported to the TSB



Reported accidents and incidents provide indicators of the transportation system's safety performance and help focus efforts on those initiatives and activities that have high safety benefits.

2.5 Investigations Started, in Process and Completed

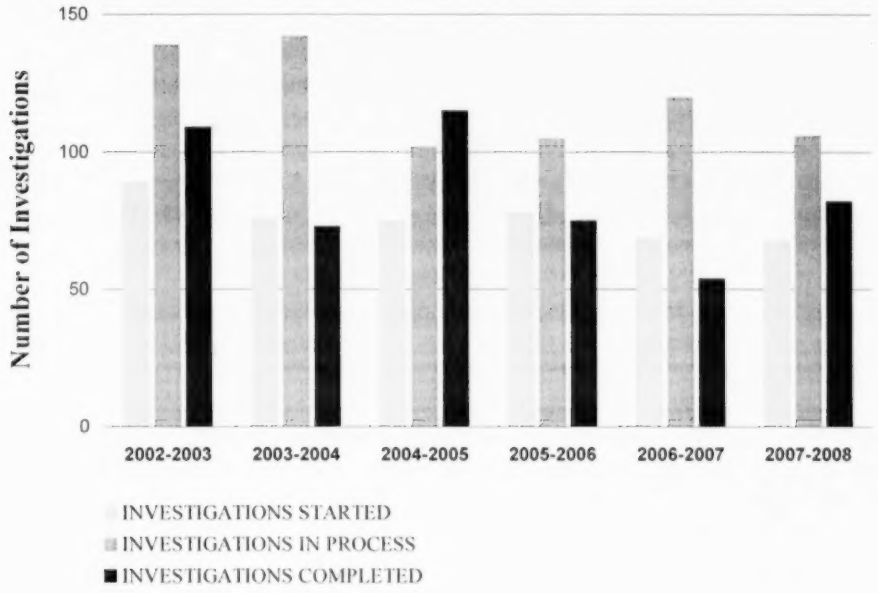
All reported occurrences were examined in accordance with the Board's Occurrence Classification Policy to identify those with the greatest potential for advancing transportation safety. Information was entered into the TSB database for historical record, trend analysis and safety deficiency validation purposes.

Investigations were undertaken for 68 of the approximately 3,900 occurrences reported to the TSB in fiscal year 2007-2008. In that same period, 82 investigations were completed, compared to 57 in the previous year.[2] Out of the 82 investigations completed, 53.7 per cent (44) had started more than two years ago, 43.9 per cent (36) more than a year ago and 2.4 per cent (2) within a year. This backlog was more pronounced in the marine and

[2] Investigations are considered complete after the final report has been issued. See Appendix A of the Annual Report to Parliament 2007-2008 for a list of reports released by the TSB in 2007-2008 by sector (http://www.tsb.gc.ca/en/publications/annual_report/2008/report2007_2008_3.asp#appendix_a).

rail sectors where respectively 94.7 per cent and 64.3 per cent of the investigations completed had started more than two years ago. The number of investigations in process decreased to 106 at the end of the fiscal year from 120 at the start.

Figure 2: Investigations Started, in Process and Completed



While overall we were aiming at reducing the average time to complete each investigation, it has continued to increase, reaching 631 days in 2007-2008. This situation is due to a combination of factors, namely the efforts to close a larger number of old investigation files in the marine and rail sectors, and to release a number of high-profile investigation reports including our investigations of derailments along the Cheakamus River in British Columbia and Lake Wabamun in Alberta, our investigations of the grounding of the BC Ferries *Queen of Oak Bay* and the sinking of the BC Ferries *Queen of the North* as well as our investigations into the rudder loss of an Air Transat aircraft and the overrun of an Air France aircraft at the Lester B. Pearson International Airport in Toronto, Ontario.

Overall, the TSB has however been successful in identifying safety deficiencies and in reducing risks in the transportation system. TSB investigations result in reports identifying safety deficiencies and, where appropriate, containing recommendations to reduce risks. Over this past year, in all cases where the TSB undertook an investigation, safety deficiencies or contributing factors were identified and communicated. These results reflect careful application of the TSB's Occurrence Classification Policy in deciding whether to investigate, and a thorough implementation of the investigation methodology. This systematic approach ensures that TSB investigation resources are invested in areas with the greatest potential safety payoffs.

2.6 Safety Communications Issued

In 2007-2008, in addition to investigation reports, the TSB issued a total of 85 safety outputs, 28.2 per cent more than in 2006-2007 (61). These outputs comprise: 18 recommendations, 41 safety advisories and 26 safety information letters (see Appendix A for a definition of these terms). The TSB also identified 14 marine safety concerns, 6 rail safety concerns and 1 air safety concern. Sections 2.8 to 2.11 contain a breakdown by sector.

Safety information is also provided informally to the appropriate person or authority throughout the investigation process, permitting them to take immediate safety actions where appropriate. In such situations, rather than issuing recommendations, the TSB can then report on the corrective actions already taken by these stakeholders.

In accordance with the *Canadian Transportation Accident Investigation and Safety Board Act*, a federal minister who is notified of a TSB recommendation must, within 90 days, advise the Board in writing of any action taken or proposed to be taken in response, or the reasons for not taking action. The Board considers each response, assessing the extent to which the related safety deficiency was addressed. When a recommendation generates responses from within and outside Canada, the Board's assessment is based primarily on the Canadian response.

2.7 Communicating Transportation Safety to Canadians and the Transportation Community

The 2007-2008 fiscal year was a very active year in terms of the number of communication and outreach activities to ensure the uptake of our recommendations and safety action, as described in Section 2.2 of our Annual Report (http://www.tsb.gc.ca/en/publications/annual_report/2008/report2007_2008.asp#2.2). While it is difficult to measure the results of our efforts to increase the reach and stretch the envelope in our communications activities, tangible signs continue to point to a certain degree of effectiveness in terms of achieving target results. Stakeholders and media use TSB's safety messages in their activities. TSB techniques and methods raise ongoing interest in Canada and around the world.

Tap Test Missed Rudder Flaw

"TSB concluded in a report that a flaw in the composite material of the rudder was to blame for the incident that occurred to the Air Transat Airbus A310 when flying from Varadero, Cuba to Quebec City in March 2005. TSB officials say that pre-flight tests appeared to show nothing amiss with the A310's rudder. The composite is made of polymer resin strengthened by embedded carbon fibres. Under stress, the fibres can separate from the surrounding resin, creating a gap that weakens the material.

When TSB investigators exposed damaged composites to air pressure changes similar to those caused by changing altitude during flights, they found that the areas of the damage almost doubled instantly. They concluded that the gap in the A310's rudder was small enough to pass unnoticed in the pre-flight tests but expanded in flight, causing the rudder to break up.

Boeing and Airbus, among others, use the tap test. The TSB hopes to inspire the use of more reliable tests."

Source: *New Scientist*, 01 December 2007.

2.8 Marine Sector

2.8.1 Occurrences and Accident Rates

In all, 453 marine accidents were reported to the TSB in 2007, a 4 per cent decrease from the 2006 total of 472 and a 9 per cent decrease from the 2002-2006 average of 497. Marine fatalities totalled 14 in 2007, down from the 2006 total of 18 and the 2002-2006 average of 22.

Shipping accidents, which comprised 87 per cent of marine accidents, reached a 30-year low of 393 in 2007, down from 422 in 2006 and from the five-year average of 447. Nearly half of all vessels involved in shipping accidents were fishing vessels. Accidents to persons aboard ship, which include falls, electrocution, and other types of injuries requiring hospitalization, totalled 60 in 2007, a 20 per cent increase from the 2006 total of 50 and a 22 per cent increase from the five-year average of 49.

Marine activity for Canadian commercial non-fishing vessels over 15 gross tons (excluding passenger vessels and cruise ships) increased by 2 per cent from the 2002-2006 average, yielding a 3 per cent decrease in the accident rate to 3.3 accidents per 1,000 movements from the five-year average of 3.4. Marine activity for foreign

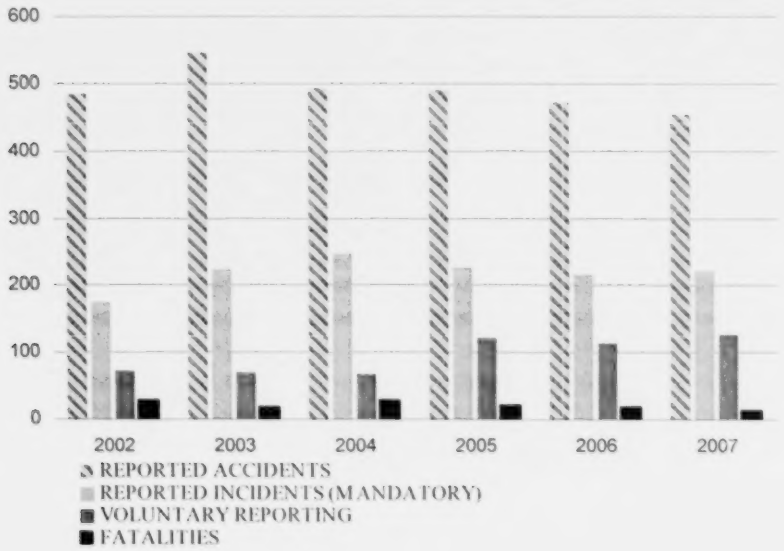
commercial non-fishing vessels increased by 2 per cent from the 2002-2006 average while the accident rate decreased by 6 per cent to 1.5 accidents per 1,000 movements, down from the five-year average of 1.6.

In 2007, shipping accidents resulted in 3 fatalities, down from 12 in 2006 and the five-year average of 15. Accidents aboard ship resulted in 11 fatalities, up 5 from the 2006 total and up 4 from the five-year average.

Twenty-eight vessels were reported lost in 2007, down from the 2006 total of 34 and the five-year average of 30.

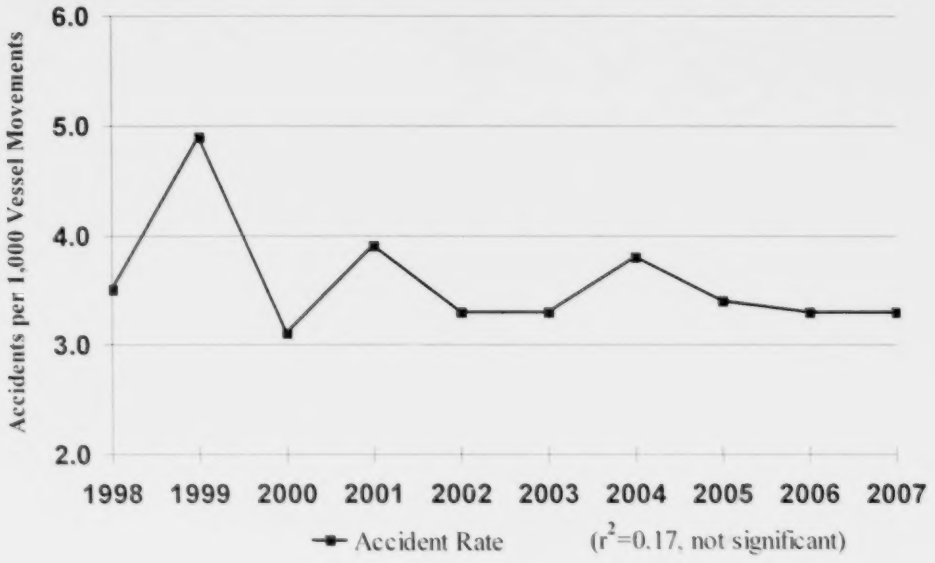
In 2007, 222 marine incidents were reported to the TSB in accordance with the mandatory reporting requirements. This represents a 3 per cent increase from the 2006 total of 216 and a 2 per cent increase from the five-year average of 218.

Figure 3: Marine Occurrences and Fatalities



One indicator of marine safety in Canada is the Canadian-flag shipping accident rate. The 2007 accident rate has remained the same as 2006 at 3.3 accidents per 1,000 movements. No significant statistical trend was found over a 10-year period.

Figure 4: Canadian-Flag Shipping Accident Rates



2.8.2 Investigations and Safety Communications

In 2007-2008, 6 marine investigations were started and 19 investigations were completed. The number of investigations completed more than doubled compared to last year. This is due to a reduction of new investigations started and concentration of the Marine Branch efforts on the significant report backlog. The average duration of completed investigations increased to 936 days compared to 801 days the year before. This increase is attributable to concentrated efforts to complete older investigations and focus on completion of the complex *Queen of the North* report, which was the largest marine investigation in TSB history.

Table 1: Marine Productivity

	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008
Investigations Started	14	16	17	8	6
Investigations Completed	18	21	12	8	19
Average Duration of Completed Investigations (Number of Days)	953	881	651	801	936
Recommendations	7	4	6	0	3
Safety Advisories	6	9	5	8	12
Safety Information Letters	11	8	8	8	4

2.8.3 Safety Actions Taken

Three marine safety recommendations were issued in 2007-2008. To obtain additional information regarding these recommendations and the other safety actions taken by the change agents, consult Section 2.3.3 of our Annual Report to Parliament 2007-2008 (http://www.tsb.gc.ca/en/publications/annual_report/2008/report2007_2008.asp#2.3.3). In 2007-2008, there were no assessments or reassessments of responses to recommendations issued in previous years.

2.8.4 Link to Resources Utilized

Table 2 shows the net costs of marine investigations for Canadians. Net costs decreased over the previous fiscal year. The average net cost per completed investigation decreased by 60.6 per cent mainly because of the end of the operations surrounding the sinking of the ferry *Queen of the North*. The number of investigations completed by investigator has more than doubled over 2006-2007. This is also attributable to the efforts spent on the elimination of the backlog.

Table 2: Marine Resources*

	2006-2007		2007-2008	
	FTEs	**In thousands of dollars**	**FTEs**	**In thousands of dollars**
Actual Costs – Marine	22.9	3,130	23.0	2,775
Internal Professional and Communication Service Costs	16.1	1,840	15.3	1,774
Corporate Services Costs	10.3	1,343	10.5	1,393
Contributions to Employee Benefit Plans		782		719
Services Received Without Charge		808		744
Net Cost of Investigations	49.3	7,904	48.8	7,405
Indicators	**2006-2007**		**2007-2008**	
Number of Investigators	20.6		20.1	
Average Net Cost per Investigation Completed	$987,946		$389,739	
Investigations Started by Investigator	0.39		0.30	
Investigations Completed by Investigator	0.44		0.94	
* Due to rounding, numbers may not sum exactly to totals.				

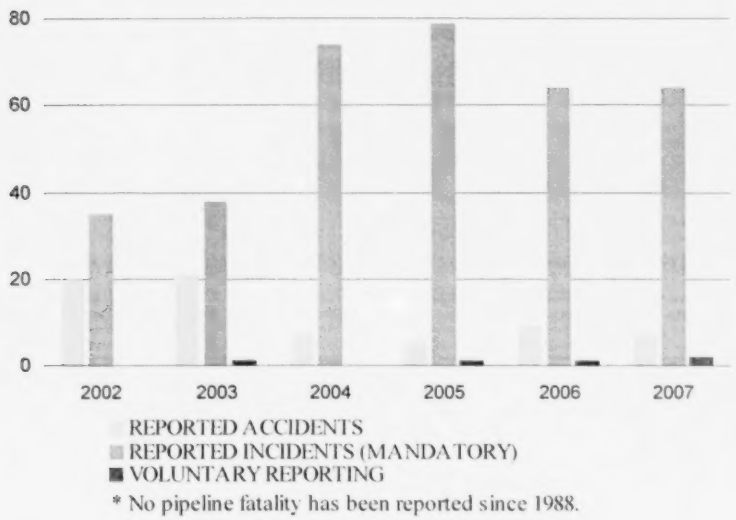
2.9 Pipeline Sector

2.9.1 Occurrences and Accident Rates

In 2007, 7 pipeline accidents were reported to the TSB, down from the 2006 total of 9 and down from the 2002-2006 average of 12. Estimated pipeline activity was unchanged from the previous year. The last fatal pipeline accident in the portion of the industry under federal jurisdiction occurred in 1988, and the last accident involving serious injury occurred in 2006.

In 2007, 64 pipeline incidents were reported to the TSB in accordance with the mandatory reporting requirements, unchanged from 64 in 2006 and up from the five-year average of 58. In all, 84 per cent of those incidents involved uncontained or uncontrolled release of small quantities of gas, oil and high-vapour-pressure products.

Figure 5: Pipeline Occurrences

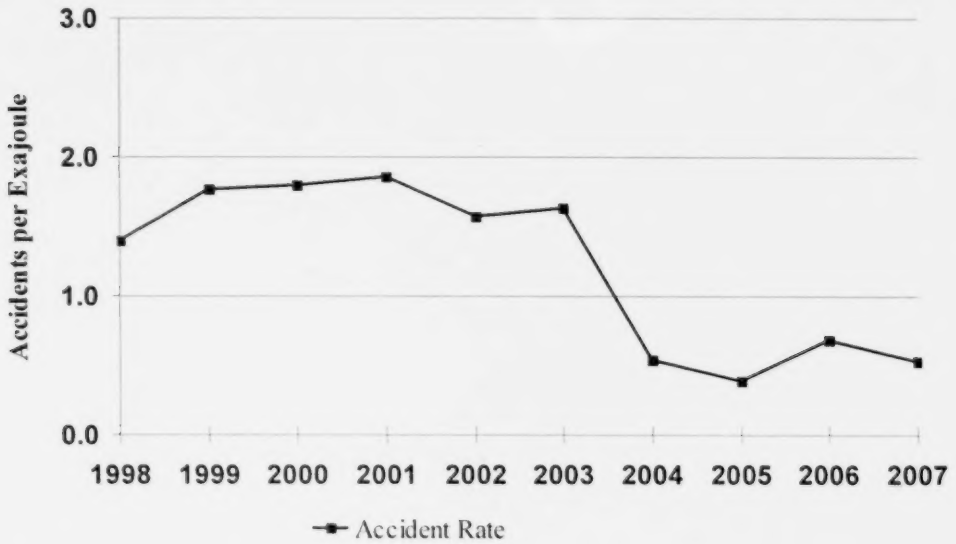


* No pipeline fatality has been reported since 1988.

One indicator of pipeline transportation safety in Canada is the pipeline accident rate.[3] This rate decreased to 0.5 pipeline accidents per exajoule in 2007, down from 0.7 in 2006 and down from the 2002-2006 average of 1.0.

[3] Pipeline accident rates after 2003 reflect the impact of clarifications to the pipeline industry of the TSB's accident and incident reporting requirements, and of internal adjustments to the data in TSB's Pipeline Occurrence Database.

Figure 6: Pipeline Accident Rates



2.9.2 Investigations and Safety Communications

In 2007-2008, two pipeline investigations were started and two investigations were completed. The average duration of completed investigations has increased to 489 days, compared to 407 days in 2006-2007.

Table 3: Pipeline Productivity

	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008
Investigations Started	0	0	2	1	2
Investigations Completed	0	2	1	1	2
Average Duration of Completed Investigations (Number of Days)	0	1,081	922	407	489
Recommendations	0	0	0	0	0
Safety Advisories	0	0	0	0	0
Safety Information Letters	0	0	0	1	0

2.9.3 Safety Actions Taken

No pipeline safety recommendations were issued in 2007-2008.

2.9.4 Link to Resources Utilized

Table 4 provides a picture of the net cost to Canadians of pipeline investigations. The net cost of pipeline investigations increased slightly compared to 2006-2007. Two investigations were started and two were completed during the year.

Table 4: Pipeline Resources*

	2006-2007		2007-2008	
	FTEs	**In thousands of dollars**	**FTEs**	**In thousands of dollars**
Actual Costs – Pipeline	2.0	216	2.0	225
Internal Professional and Communication Service Costs	1.4	127	1.3	144
Corporate Services Costs	0.9	93	0.9	113
Contributions to Employee Benefit Plans		54		58
Services Received Without Charge		56		60
Net Cost of Investigations	4.3	546	4.1	600
Indicators	**2006-2007**		**2007-2008**	
Number of Investigators	2.0		1.95	
Average Net Cost per Investigation Completed	$545,422		$300,204	
Investigations Started by Investigator	0.5		1.03	
Investigations Completed by Investigator	0.5		1.03	
* Due to rounding, numbers may not sum exactly to totals.				

2.10 Rail Sector

2.10.1 Occurrences and Accident Rates

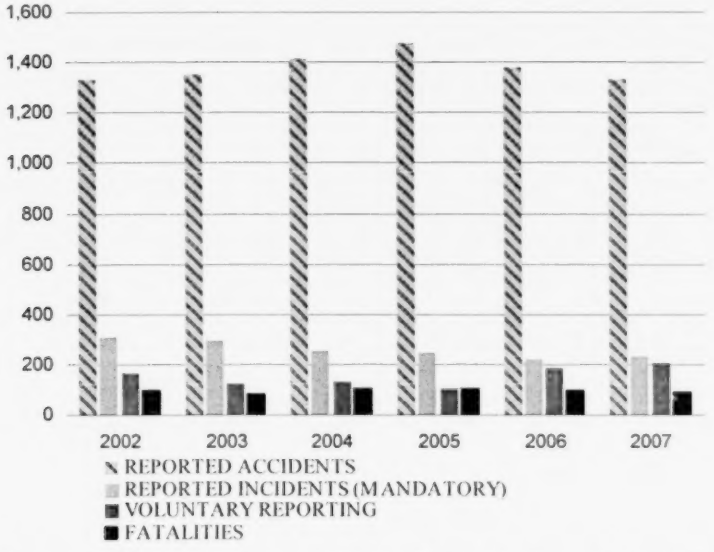
A total of 1,331 rail accidents were reported to the TSB in 2007, a 3 per cent decrease from the 2006 total of 1,378 and a 4 per cent decrease from the 2002-2006 average of 1,391. Estimated rail activity decreased by 3 per cent from 2006, but is comparable to the five-year average. The accident rate decreased to 14.3 accidents per million train-miles in 2007, compared to 14.4 in 2006 and the five-year rate of 15.2. Rail-related fatalities totalled 86 in 2007, compared to the 2006 total and five-year average of 95.
Eight main-track collisions occurred in 2007, compared to three in 2006 and the five-year average of six. In 2007, there were 161 main-track derailments, an increase of 14 per cent from the 2006 total of 141 and of 3 per cent from the five-year average of 156.
Non-main-track derailments decreased to 639 in 2007 from 704 in 2006 and from the five-year average of 707.

In 2007, crossing accidents decreased to 218 from the 2006 total of 248 and from the five-year average of 254. Crossing-related fatalities numbered 27, down from 28 in 2006 and from the five-year average of 33. Trespasser accidents increased by 8 per cent to 99 in 2007 from 92 in 2006, and increased by 21 per cent over the five-year average of 82. With a total of 57 fatalities in 2007, trespasser accidents continued to account for the majority of rail fatalities.

In 2007, 192 rail accidents involved dangerous goods (this also includes crossing accidents in which the motor vehicle is carrying a dangerous good), up from 183 in 2006 but down from the five-year average of 210. Five of these accidents resulted in a release of product.

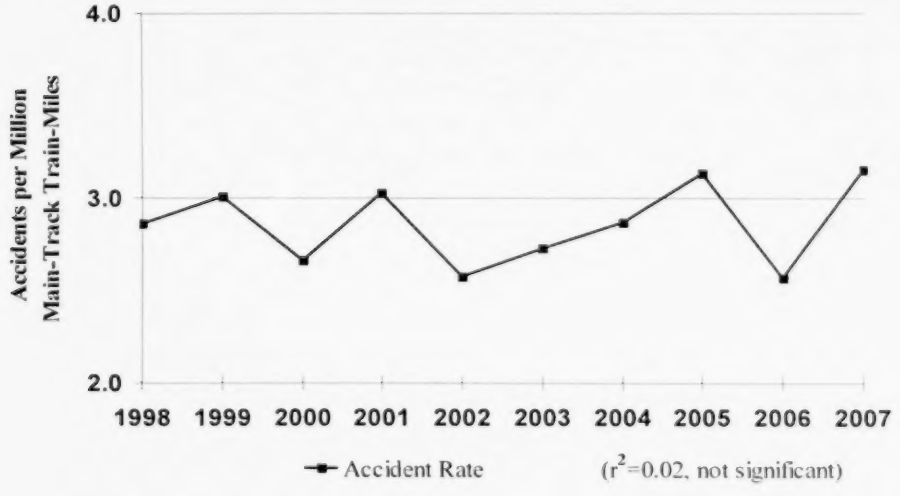
In 2007, rail incidents reported to the TSB in accordance with the mandatory reporting requirements totalled 233, up from 221 in 2006 but down from the five-year average of 265. Movements exceeding limits of authority incidents (113) comprised the largest proportion of the 233 reportable incidents. The second largest proportion was dangerous goods leaker incidents (90).

Figure 7: Rail Occurrences and Fatalities



One indicator of rail transportation safety in Canada is the main-track accident rate. This rate increased from 2.6 accidents per million main-track train-miles in 2006 to 3.2 in 2007.[4] No significant statistical trend was found over a 10-year period.

Figure 8: Main-Track Accident Rates



[4] Because accident statistics (derailments since 2001) have been adjusted in light of clarifications to industry of TSB's reporting requirements, historical rail accident rates after 2001 have been updated accordingly.

2.10.2 Investigations and Safety Communications

A total of 11 rail investigations were started in 2007-2008 and 14 investigations were completed. The average duration of completed investigations increased to 697 days compared to 598 days the year before. This increase is attributable to concentrated efforts to complete older investigations.

Table 5: Rail Productivity

	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008
Investigations Started	14	14	9	18	11
Investigations Completed	15	25	9	12	14
Average Duration of Completed Investigations (Number of Days)	894	618	519	598	697
Recommendations	4	3	0	2	4
Safety Advisories	7	6	9	8	16
Safety Information Letters	11	10	8	2	13

2.10.3 Safety Actions Taken

Four rail recommendations were issued in 2007-2008. To obtain additional information regarding these recommendations, the responses received to some of them as well as all the other safety actions taken by the change agents, consult Section 2.5.3 of the TSB Annual Report to Parliament 2007-2008 (http://www.tsb.gc.ca/en/publications/annual_report/2008/report2007_2008_2.asp#2.5.3). The Board's assessment of responses to recommendations issued in 2006-2007 in the rail sector can also be found in this section.

The Rail Branch also reassessed responses to 120 recommendations issued since 1991. With Board approval, 4 recommendations went from active to inactive status and 21 recommendations remained active. The Board's reassessments were communicated to the appropriate change agent(s) for information and action.

2.10.4 Link to Resources Utilized

Table 6 provides a picture of the net cost to Canadians of rail investigations. The net cost of rail investigations remained more or less the same compared to the previous year. The average net cost per investigation completed decreased by 15.9 per cent compared to the

previous year. The number of investigations started by investigator diminished by 38.9 per cent and the number of investigations completed by investigator increased by 15.6 per cent. These differences can be attributed to the fact that most of the investigations completed were started in previous fiscal years and to the reduced number of new investigations that were started.

Table 6: Rail Resources*

	2006-2007		2007-2008	
	FTEs	**In thousands of dollars**	**FTEs**	**In thousands of dollars**
Actual Costs – Rail	22.1	2,834	21.3	2,630
Internal Professional and Communication Service Costs	15.5	1,666	14.2	1,681
Corporate Services Costs	13.0	1,216	9.7	1,320
Contributions to Employee Benefit Plans		708		682
Services Received Without Charge		732		705
Net Cost of Investigations	50.6	7,156	45.2	7,018
Indicators	**2006-2007**		**2007-2008**	
Number of Investigators		18.95		18.92
Average Net Cost per Investigation Completed		$596,345		$501,293
Investigations Started by Investigator		0.95		0.58
Investigations Completed by Investigator		0.64		0.74
* Due to rounding, numbers may not sum exactly to totals.				

2.11 Air Sector

2.11.1 Occurrences and Accident Rates

Canadian-registered aircraft, other than ultralights, were involved in 284 reported accidents in 2007, an 8 per cent increase from the 2006 total of 262 and a 6 per cent increase from the 2002-2006 average of 268. The estimate of flying activity for 2007 is

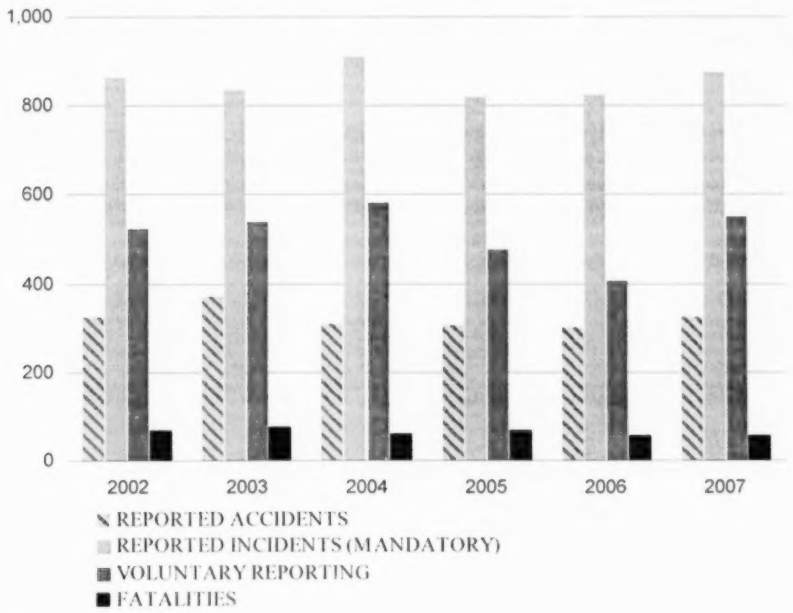
4,373,000 hours, yielding an accident rate of 6.5 accidents per 100,000 flying hours, up from the 2006 rate of 6.3 but down from the five-year rate of 6.7. Canadian-registered aircraft, other than ultralights, were involved in 33 fatal occurrences with 49 fatalities in 2007, comparable to the 31 fatal occurrences with 52 fatalities in 2006 and the five-year average of 30 fatal occurrences with 50 fatalities. A total of 12 fatal occurrences involved commercial aircraft (7 aeroplanes and 5 helicopters), and 14 of the remaining 21 fatal occurrences involved privately operated aeroplanes.

The number of accidents involving ultralights increased to 30 in 2007 from 28 in 2006, and the number of fatal accidents increased to 5 in 2007 from 1 in 2006.

The number of foreign-registered aircraft accidents in Canada decreased to 10 in 2007 from 14 in 2006. There were no fatal accidents in 2007, down from 2 in 2006.

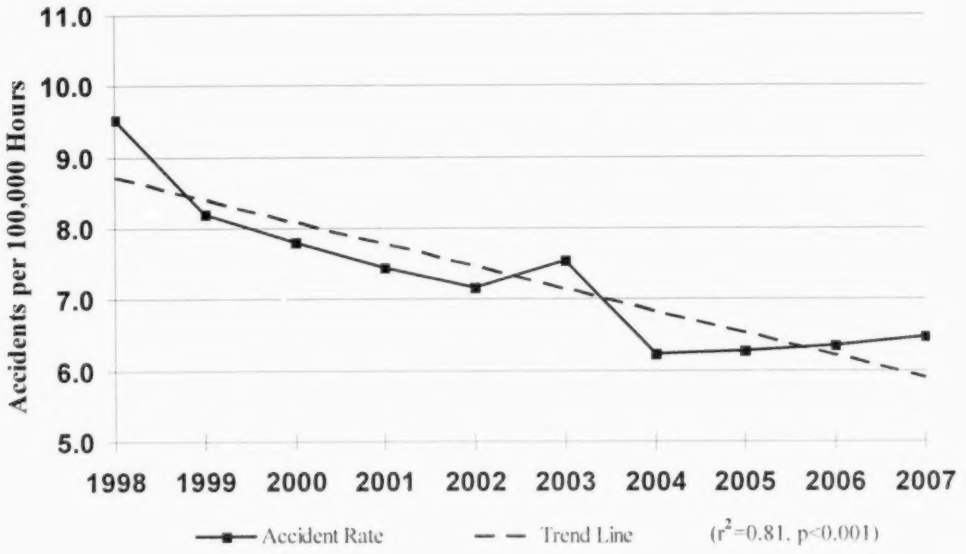
In 2007, a total of 874 incidents were reported to the TSB in accordance with the mandatory reporting requirements. This represents a 6 per cent increase from the 2006 total of 825 and a 3 per cent increase from the 2002-2006 average of 851.

Figure 9: Air Occurrences and Fatalities



One indicator of air transportation safety in Canada is the accident rate for Canadian-registered aircraft. In 2007, this rate increased to 6.5 accidents per 100,000 hours from the 2006 rate of 6.3, but remained below the five-year average of 6.7. The trend line shows a significant downward trend over the past 10 years.

Figure 10: Canadian-Registered Aircraft Accident Rates



2.11.2 Investigations and Safety Communications

A total of 49 air investigations were started in 2007-2008 and 47 investigations were completed. This represents an increase in the number of investigations completed compared to the previous year (36). The average duration of completed investigations has decreased to 493 days, compared to 516 days the year before.

Table 7: Air Productivity

	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008
Investigations Started	47	44	50	41	49
Investigations Completed	40	67	53	36	47
Average Duration of Completed Investigations (Number of Days)	485	524	404	516	493
Recommendations	0	4	6	4	11
Safety Advisories	9	9	7	16	13
Safety Information Letters	8	6	5	12	9

2.11.3 Safety Actions Taken

To obtain additional information regarding the 11 air safety recommendations issued in 2007-2008 as well as all the other safety actions taken by the change agents, consult Section 2.6.3 of the TSB Annual Report to Parliament 2007-2008 (http://www.tsb.gc.ca/en/publications/annual_report/2008/report2007_2008_2.asp#2.6.3). The Board's assessment of responses to recommendations issued in 2006-2007 in the air sector can also be found in this section.

The Air Branch also reassessed responses to 39 recommendations issued in previous years. With Board approval, 5 recommendations went from active to inactive status. At the end of fiscal year 2007-2008, there were 43 active recommendations. The Board's reassessments were communicated to the appropriate change agent(s) for information and action.

2.11.4 Link to Resources Utilized

Table 8 provides a picture of the net cost to Canadians of air investigations. Compared to the previous year, the net cost of investigations increased slightly. However, the average net cost per investigation completed decreased by 23.3 per cent because most of the investigations completed were started in the previous fiscal years. The number of investigations started and completed per investigator increased respectively by 26.3 per cent and 35.8 per cent.

Table 8: Air Resources*

	2006-2007		2007-2008	
	FTEs	**In thousands of dollars**	**FTEs**	**In thousands of dollars**
Actual Costs – Air	58.1	7,444	55.8	7,051
Internal Professional and Communication Service Costs	40.8	4,377	37.2	4,507
Corporate Services Costs	26.1	3,194	25.4	3,540
Contributions to Employee Benefit Plans		1,859		1,828
Services Received Without Charge		1,922		1,890
Net Cost of Investigations	125.1	18,797	118.3	18,815
Indicators	**2006-2007**		**2007-2008**	
Number of Investigators	54.03		51.75	
Average Net Cost per Investigation Completed	$522,135		$400,329	
Investigations Started by Investigator	0.76		0.95	
Investigations Completed by Investigator	0.67		0.91	
* Due to rounding, numbers may not sum exactly to totals.				

Section 3: Supplementary Information

3.1 Departmental Link to Government of Canada Outcome Areas

The TSB has one strategic outcome: to advance transportation safety, thereby reducing risks to people, property and the environment. This strategic outcome contributes to reach the broader Government of Canada outcome of "safe and secure communities."

3.2 Financial Information

These tables provide a summary of the financial resources allocated to the TSB as well as details on the actual resources utilized for the delivery of the mandate and for the achievement of the above-noted objectives.

The following table explains the way Parliament voted resources to the TSB and in essence replicates the summary table listed in the Main Estimates.

Financial Table 1: Voted and Statutory Items

(in thousands of dollars)		2007-2008			
Vote	**Vote Wording**	**Main Estimates**	**Planned Spending**	**Authorities**	**Actual Spending**
	Canadian Transportation Accident Investigation and Safety Board				
10	Program expenditures	25,415	25,793	28,210	27,104
(S)	Contributions to employee benefit plans	3,557	3 ,557	3,287	3,287
(S)	Spending of proceeds from the disposal of surplus Crown assets	0	0	39	39
(S)	Re-spendable revenues	0	0	10	10
	Total Department	28,972	29,350	31,546	30,440
Total authorities are Main Estimates plus Treasury Board transfers.					

The following table provides a detailed breakdown of the changes to the total authorities during the course of the year.

Authorities	Amount (in thousands of dollars)
Main Estimates	28,972
Adjustments:	
- Treasury Board Transfer – Vote 15[1]	954
- Treasury Board Transfer – Vote 22[2]	1,274
- Treasury Board Transfer – Vote 23[3]	567
(S) Year-end adjustment to employee benefits plan	(270)
(S) Spending of proceeds from the disposal of surplus Crown assets	39
(S) Respendable revenues	10
Total Authorities	31,546

(1) This adjustment reflects the amounts received to offset the salary increases provided under new collective agreements.
(2) This adjustment represents the 2006-2007 operating budget carry forward.
(3) This adjustment reflects the amounts received to offset the paylist shortfalls resulting of the payment of severance pay, vacation credits upon termination of employment and some parental benefits.

The following table provides a comparison of the Main Estimates, planned spending, total authorities, and actual spending for the most recently completed fiscal year, as well as historical figures for actual spending by the TSB. In 2007-2008, the TSB used $30,440,000 of the permitted authorities. TSB's audited financial statements are provided in Appendix C.

Financial Table 2: Comparison of Planned to Actual Spending (Full-Time Equivalents Included)

Program Activities (in thousands of dollars)	2005-2006 Actual	2006-2007 Actual	2007-2008			
			Main Estimates	Planned Spending	Total Authorities	Actual
Safety Investigations	24,865	24,484	23,958	24,271	25,488	24,594
Corporate Services	6,434	6,400	5,014	5,079	6,058	5,846
Total	31,299	30,884	28,972	29,350	31,546	30,440
Plus: Cost of services received without charge	3,303	3,518	3,108	3,108	3,399	3,399
Total departmental spending	34,602	34,402	32,080	32,458	34,945	33,839
Full-time equivalents	234	226	235	235	N/A	216
Total authorities are Main Estimates plus Treasury Board transfers.						

Overall, actual expenditures for 2007-2008 were lower than the expenditures in 2006-2007 and 2005-2006. This decrease is attributed to the fact that, over the last two years, the organization was granted additional spending authorities to cover the costs associated with major safety investigations. In addition, this year, a high number of positions were vacant, and for various reasons, the funds allocated to the priority projects have not all been spent. Disregarding this information, the TSB actual spending has not increased in the last four years except to offset the employee salary increases set out in the new collective agreements.

3.3 Other Information

You will find information on the following subjects on the TSB website (www.tsb.gc.ca):

- User Fees
- Service Standard for User Fees
- Response to Parliamentary Committees and External Audits
- Response to Internal Audits
- Travel Policies

3.4 TSB Information and Contacts

You will find on the TSB website (www.tsb.gc.ca) the investigation reports that we have published, periodic statistical reports for each of the four transportation sectors and all of the TSB most recent reports to Parliament.

For further information, contact:

Communications Division
Transportation Safety Board of Canada
Place du Centre
200 Promenade du Portage
4th Floor
Gatineau, Quebec
K1A 1K8

e-mail: communications@tsb.gc.ca
Telephone: 819-994-3741
Fax: 819-997-2239

Appendices

Appendix A – Glossary
Appendix B – Links to Other Organizations Involved in Transportation Safety
Appendix C – Audited Financial Statements

Appendix A – Glossary

Recommendation	a formal way to draw attention to systemic safety issues, normally warranting ministerial attention
Safety Advisory	a less formal means for communicating lesser safety deficiencies to officials within and outside the government
Safety Information Letter	a letter that communicates safety-related information, often concerning local safety hazards, to government and corporate officials

Appendix B – Links to Other Organizations Involved in Transportation Safety

More information on transportation safety in Canada is available from other federal government agencies who play a role in this area. The Internet addresses for the main organizations are as follows:

Transport Canada ..... www.tc.gc.ca

National Energy Board ..... www.neb.gc.ca

Canadian Coast Guard ..... www.ccg-gcc.gc.ca

Canadian Transportation Agency ..... www.cta-otc.gc.ca

Royal Canadian Mounted Police ..... www.rcmp-grc.gc.ca

Human Resources and Social Development Canada ..... www.hrsdc.gc.ca

National Defence ..... www.dnd.ca

Information on transportation safety in selected countries is available on the following Internet sites:

United States

- National Transportation Safety Board ..... www.ntsb.gov
- Federal Aviation Administration ..... www.faa.gov

Australia

- Australian Transport Safety Bureau ..... www.atsb.gov.au

France

- Bureau d'Enquêtes et d'Analyses pour la Sécurité de l'Aviation Civile ..... www.bea-fr.org

United Kingdom

- Air Accidents Investigation Branch ..... www.aaib.dft.gov.uk
- Marine Accident Investigation Branch ..... www.maib.dft.gov.uk

International

- International Civil Aviation Organization ..... www.icao.org
- International Maritime Organization ..... www.imo.org
- International Transportation Safety Association ..... www.itsasafety.org

Appendix C – Audited Financial Statements

Transportation Safety Board of Canada
Statement of Management Responsibility

Responsibility for the integrity and objectivity of the accompanying financial statements for the year ended March 31, 2008 and all information contained in these statements rests with management of the Transportation Safety Board of Canada (TSB). These financial statements have been prepared by management in accordance with Treasury Board accounting policies which are consistent with Canadian generally accepted accounting principles for the public sector.

Management is responsible for the integrity and objectivity of the information in these financial statements. Some of the information in the financial statements is based on management's best estimates and judgment and gives due consideration to materiality. To fulfil its accounting and reporting responsibilities, management maintains a set of accounts that provides a centralized record of the TSB's financial transactions. Financial information submitted to the *Public Accounts of Canada* and included in the TSB's *Departmental Performance Report* is consistent with these financial statements.

Management maintains a system of financial management and internal control designed to provide reasonable assurance that financial information is reliable, that assets are safeguarded and that transactions are in accordance with the *Financial Administration Act*, are executed in accordance with prescribed regulations, within Parliamentary authorities, and are properly recorded to maintain accountability of Government funds. Management also seeks to ensure the objectivity and integrity of data in its financial statements by careful selection, training and development of qualified staff, by organizational arrangements that provide appropriate divisions of responsibility, and by communication programs aimed at ensuring that regulations, policies, standards and managerial authorities are understood throughout the TSB.

The financial statements of the TSB have been audited by the Auditor General of Canada, the independent auditor for the Government of Canada.

Wendy A. Tadros
Chair

Jean L. Laporte, FCGA
Senior Financial Officer

Gatineau, Canada
August 1, 2008

Auditor General of Canada
Verificatrice generale du Canada

AUDITOR'S REPORT

To the Chair of the Transportation Safety Board of Canada
and to the President of the Queen's Privy Council for Canada

I have audited the Statement of Financial Position of the Transportation Safety Board of Canada as at March 31, 2008 and the Statements of Operations, Equity of Canada and Cash Flow for the year then ended. These financial statements are the responsibility of the Transportation Safety Board of Canada's management. My responsibility is to express an opinion on these financial statements based on my audit.

I conducted my audit in accordance with Canadian generally accepted auditing standards. Those standards require that I plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In my opinion, these financial statements present fairly, in all material respects, the financial position of the Transportation Safety Board of Canada as at March 31, 2008 and the results of its operations and its cash flows for the year then ended in accordance with Canadian generally accepted accounting principles.

Alain Boucher, CA
Principal
for the Auditor General of Canada

Ottawa, Canada
August 1, 2008

240 rue Sparks Street, Ottawa, Ontario K1A 0G6

Transportation Safety Board of Canada
Statement of Financial Position
At March 31
(in thousands of dollars)

	2008	2007
ASSETS		
Financial assets		
Due from the Consolidated Revenue Fund	$ 2,163	$ 1,812
Accounts receivable and advances (Note 4)	317	329
Total financial assets	2,480	2,141
Non-financial assets		
Prepaid expenses	38	53
Inventory	76	80
Tangible capital assets (Note 5)	5,382	5,062
Total non-financial assets	5,496	5,195
Total assets	**$ 7,976**	**$ 7,336**
Liabilities		
Accounts payable and accrued liabilities	$ 2,439	$ 2,099
Vacation pay and compensatory leave	974	1,045
Employee severance benefits (Note 6)	3,802	4,020
Total liabilities	7,215	7,164
Equity of Canada	761	172
Total liabilities and equity of Canada	**$ 7,976**	**$ 7,336**

Contingent liabilities and contractual obligations (Notes 7 and 8 respectively)

The accompanying notes form an integral part of these financial statements.

Wendy A. Tadros
Chair

Jean L. Laporte, FCGA
Senior Financial Officer

Gatineau, Canada
August 1, 2008

Transportation Safety Board of Canada
Statement of Operations
For the Year Ended March 31
(in thousands of dollars)

	2008	2007
Expenses		
Salaries and wages	$ 19,544	$ 20,266
Employee benefits	4,418	5,151
Professional and special services	2,891	3,031
Transportation and communications	2,050	2,017
Accommodation	1,937	1,850
Amortization	944	998
Repairs and maintenance	625	626
Utilities, materials, supplies and equipment	445	476
Information	185	150
Rentals	138	117
Loss on disposal of assets	17	5
Other expenses	6	1
Total Expenses	**33,200**	**34,688**
Revenues		
Other non-tax revenues	21	11
Sales of goods and services	17	7
Total Revenues	**38**	**18**
Net Cost of Operations before administration of cost-shared activities	**33,162**	**34,670**
Other Expenses (Note 9(c))	312	338
Other Income (Note 9(c))	312	370
Net Cost of Operations	**$ 33,162**	**$ 34,638**

The accompanying notes form an integral part of these financial statements.

Transportation Safety Board of Canada
Statement of Equity of Canada
For the Year Ended March 31
(in thousands of dollars)

	2008	2007
Equity of Canada, beginning of year	**$ 172**	**$ 475**
Net cost of operations	(33,162)	(34,638)
Net cash provided by Government of Canada	30,001	31,294
Change in due from the Consolidated Revenue Fund	351	(477)
Services received without charge (Note 9(a))	3,399	3,518
Equity of Canada, end of year	**$ 761**	**$ 172**

The accompanying notes form an integral part of these financial statements.

Transportation Safety Board of Canada
Statement of Cash Flow
For the Year Ended March 31
(in thousands of dollars)

	2008	2007
Operating activities		
Net cost of operations	$ 33,162	$ 34,638
Non-cash items:		
Services provided without charge by other government departments	(3,399)	(3,518)
Amortization of tangible capital assets	(944)	(998)
Loss on disposal and write-down of tangible capital assets	(17)	(5)
	(4,360)	(4,521)
Variations in Statement of Financial Position:		
Increase (decrease) in accounts receivable and advances	(12)	270
Increase (decrease) in prepaid expenses	(15)	1
Increase (decrease) in inventory	(4)	(50)
Decrease (Increase) in liabilities	(51)	116
Cash used by operating activities	**28,720**	**30,454**
Capital investment activities		
Acquisitions of tangible capital assets	1,314	842
Proceeds from disposal of tangible capital assets	(33)	(2)
Cash used by capital investment activities	**1,281**	**840**
Net cash provided by Government of Canada	**$ 30,001**	**$ 31,294**

The accompanying notes form an integral part of these financial statements.

Transportation Safety Board of Canada
Notes to the Financial Statements

1. Authority and Objectives

The Canadian Transportation Accident Investigation and Safety Board (CTAISB) was established in 1990 under the *Canadian Transportation Accident Investigation and Safety Board Act* and is a departmental corporation named in Schedule II to the *Financial Administration Act*. In its day-to-day activities the CTAISB is also known by the name Transportation Safety Board of Canada, or simply the TSB. The objective of the TSB is to advance transportation safety. It seeks to identify safety deficiencies in transportation occurrences and to make recommendations designed to eliminate or reduce any such safety deficiencies. In addition to investigations, including where necessary public inquiries into selected occurrences, the TSB may conduct studies into more general matters pertaining to transportation safety. The TSB has the exclusive authority to make findings as to causes and contributing factors when it investigates a transportation occurrence. The TSB's operating expenditures are funded by a budgetary lapsing authority whereas contributions to employee benefit plans are funded by statutory authorities.

2. Summary of Significant Accounting Policies

The financial statements have been prepared in accordance with Treasury Board accounting policies which are consistent with Canadian generally accepted accounting principles for the public sector.

Significant accounting policies are as follows:

(a) Parliamentary appropriations - the TSB is financed by the Government of Canada through Parliamentary appropriations. Appropriations provided to the TSB do not parallel financial reporting according to Canadian generally accepted accounting principles since appropriations are primarily based on cash flow requirements. Consequently, items recognized in the Statement of Operations and the Statement of Financial Position are not necessarily the same as those provided through appropriations from Parliament. Note 3 provides a high-level reconciliation between the two bases of reporting.

(b) Net Cash Provided by Government - The TSB operates within the Consolidated Revenue Fund (CRF), which is administered by the Receiver General for Canada. All cash received by the TSB is deposited to the CRF and all cash disbursements made by the TSB are paid from the CRF. The net cash provided by Government is the difference between all cash receipts and all cash disbursements including transactions between departments of the federal government.

(c) Due from the Consolidated Revenue Fund – represents the amount of cash that the TSB is entitled to draw from the CRF, without further appropriations, in order to discharge its liabilities.

(d) Revenues - Revenues are accounted for in the period in which the underlying transaction or event occurred that gave rise to the revenues.

(e) Expenses - Expenses are recorded on an accrual basis:

Vacation pay and compensatory leave are expensed as the benefits accrue to employees under their respective terms of employment.

Services provided without charge by other government departments are recorded as operating expenses at their estimated cost.

(f) Employee future benefits

Pension benefits: Eligible employees participate in the Public Service Pension Plan, a multi-employer plan administered by the Government of Canada. The TSB's contributions to the Plan are charged to expenses in the year incurred and represent the total TSB obligation to the Plan. Current legislation does not require the TSB to make contributions for any actuarial deficiencies of the Plan.

Severance benefits: Employees are entitled to severance benefits under labour contracts or conditions of employment. These benefits are accrued as employees render the services necessary to earn them. The obligation relating to the benefits earned by employees is calculated using information derived from the results of the actuarially determined liability for employee severance benefits for the Government as a whole.

(g) Accounts receivables are stated at amounts expected to be ultimately realized; a provision is made for receivables where recovery is considered uncertain.

(h) Inventories – Inventories consists of parts, material and supplies held for future program delivery and not intended for re-sale. They are valued at cost. If they no longer have service potential, they are valued at the lower of cost or net realizable value.

(i) Tangible capital assets - All tangible capital assets and leasehold improvements having an initial cost of $2,000 or more are recorded at their acquisition cost.

Amortization of tangible capital assets is done on a straight-line basis over the estimated useful life of the asset as follows:

Asset class	Amortization period
Buildings	30 years
Furniture	10 years
Office equipment	5 years
Laboratory equipment	10 years
Informatics hardware	4 years
Informatics software (purchased)	3 years
Informatics software (in house developed)	10 years
Motor vehicles	7 years
Other vehicles	15 years
Leasehold improvements	Lesser of the remaining term of the lease or useful life of the improvement

(j) Measurement uncertainty - The preparation of these financial statements in accordance with Treasury Board accounting policies which are consistent with Canadian generally accepted accounting principles for the public sector, requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses reported in the financial statements. At the time of preparation of these statements, management believes the estimates and assumptions to be reasonable. The most significant items where estimates are used are the useful lives of tangible capital assets, the assumptions underlying the employee severance benefits liability and the assessment of contingent liabilities. Actual results could significantly differ from those estimated. Management's estimates are reviewed periodically and, as adjustments become necessary, they are recorded in the financial statements in the year they become known.

3. Parliamentary Appropriations

The TSB receives its funding through annual Parliamentary appropriations. Items recognized in the Statement of Operations and the Statement of Financial Position in one year may be funded through Parliamentary appropriations in prior, current or future years. Accordingly, the TSB has different net results of operations for the year on a government funding basis than on an accrual accounting basis. The differences are reconciled in the following tables:

(a) Reconciliation of net cost of operations to current year Parliamentary appropriations used:

	2008	2007
	(in thousands of dollars)	
Net cost of operations	**$ 33,162**	**$ 34,638**
Adjustments for items affecting net cost of operations but not affecting appropriations:		
Less:		
Services provided without charge	(3,399)	(3,518)
Amortization of tangible capital assets	(944)	(998)
Loss on disposal of assets and write-down of tangible capital assets	(17)	(5)
	(4,360)	**(4,521)**
Add:		
Employee severance benefits	218	(160)
Vacation pay and compensatory leave	71	80
Refund of previous years expenses	21	11
Miscellaneous non-tax revenues	17	39
Payables at year-end adjustment	16	4
	343	**(26)**
Adjustments for items not affecting net cost of operations but affecting appropriations:		
Less:		
Prepaid expenses (decrease) increase	(15)	1
Inventory used	(4)	(50)
	(19)	**(49)**
Add:		
Acquisition of tangible capital assets	1,314	842
	1,314	**842**
Current year Parliamentary appropriations used	**$ 30,440**	**$ 30,884**

(b) Parliamentary appropriations provided and used

	2008	2007
	(in thousands of dollars)	
Vote 10 - CTAISB Operating expenditures	$ 25,415	$ 25,486
Supplementary Vote 10a		1,674
Transfer from Treasury Board - Vote 15	954	1,096
Transfer from Treasury Board – Vote 22	1,274	
Transfer from Treasury Board – Vote 23	567	
Spending of revenues as per *Financial Administration Act* section 29.1	10	4
Statutory amounts:		
Contribution to employee benefit plans	3,287	3,403
Spending of proceeds from disposal of surplus Crown assets	39	4
Minus:		
Lapsed appropriations: Operating	(1,106)	(783)
Current year Parliamentary appropriations used	$ 30,440	$ 30,884

(c) Reconciliation of net cash provided by Government of Canada to current year Parliamentary appropriations used

	2008	2007
	(in thousands of dollars)	
Net cash provided by Government of Canada	$ 30,001	$ 31,294
Proceeds from disposal of tangible capital assets	33	2
Refund of previous years expenses	21	11
Miscellaneous non-tax revenues	17	39
Payables at year-end adjustment	16	4
Decrease (Increase) in accounts receivable and advances	12	(270)
Increase (Decrease) in accounts payable and accrued liabilities	340	(197)
Other adjustments		1
Current year Parliamentary appropriations used	$ 30,440	$ 30,884

4. Accounts Receivable and Advances

	2008	2007
	(in thousands of dollars)	
Receivables from other Federal Government departments and agencies	$ 307	$ 316
Receivables from external parties	1	5
Employee advances	9	8
Total	**$ 317**	**$ 329**

5. Tangible Capital Assets

(in thousands of dollars)

Capital Asset Class	Historical Cost March 31, 2007	Acquisitions	Work in progress transfers	Disposals and write-offs	Accumulated Amortization March 31, 2008	Net Book Value March 31, 2008	Net Book Value March 31, 2007
Buildings	$ 2,854	$ -	$ -	$ -	$ 2,282	$ 572	$ 689
Furniture	981	178	-	-	561	598	500
Office equipment	212	-	-	-	212	-	3
Laboratory equipment	2,407	165	-	-	1,913	659	588
Informatics hardware	3,414	411	-	-	3,128	697	564
Informatics software (purchased)	670	58	-	-	601	127	136
Informatics software (in house developed)	2,002	-	590	-	319	2,273	1,885
Informatics software (in development)	270	320	(590)	-	-	-	270
Motor vehicles	837	115	-	(239)	392	321	321
Other vehicles	103	-	-	-	35	68	76
Leasehold improvements	34	67	-	-	34	67	-
Total	$ 13,784	$ 1,314	$ -	$ (239)	$ 9,477	$ 5,382	$ 5,062

6. Employee Benefits

(a) Pension benefits: The TSB's employees participate in the Public Service Pension Plan which is sponsored and administered by the Government of Canada. Pension benefits accrue up to a maximum period of 35 years at a rate of 2 percent per year of pensionable service, times the average of the best five consecutive years of earnings. The benefits are integrated with Canada/Quebec Pension Plans benefits and they are indexed to inflation.

Both the employees and the TSB contribute to the cost of the Plan. The 2007-2008 expense amounts to $2,396,441 ($2,508,000 in 2006-2007), and are recorded as employee benefit expenses, which represents approximately 2.7 times the contributions by employees, which amounts to $890,858.

The TSB's responsibility with regard to the Plan is limited to its contributions. Actuarial surpluses or deficiencies are recognized in the financial statements of the Government of Canada, as the Plan's sponsor.

(b) Severance benefits: The TSB provides severance benefits to its employees based on eligibility, years of service and final salary. These severance benefits are not pre-funded. Benefits will be paid from future appropriations. Information about the severance benefits, measured as at March 31, is as follows:

	2008	2007
	(in thousands of dollars)	
Employee severance benefits, beginning of year	$ 4,020	$ 3,860
Expense for the year recorded as employee benefits	178	608
Benefits paid during the year	(396)	(448)
Employee severance benefits, end of year	$ 3,802	$ 4,020

7. Contingent Liabilities

In the normal course of its operations, the TSB becomes involved in various legal actions. Some of these potential liabilities may become actual liabilities when one or more future events occur or fail to occur. To the extent that the future event is likely to occur or fail to occur, and a reasonable estimate of the loss can be made, an estimated liability is accrued and an expense recorded on the TSB's financial statements.

As at March 31, 2008, there are no outstanding legal actions against the TSB.

8. Contractual Obligations

The nature of the TSB's activities can result in some large multi-year contracts and obligations whereby the TSB will be obligated to make future payments when the services/goods are received.

Significant contractual obligations that can be reasonably estimated are summarized as follows:

(in thousands of dollars)	2009	2010	Total
Acquisition of goods and services	$ 1,117	$ 17	$ 1,134

9. Related Party Transactions

The TSB is related as a result of common ownership to all Government of Canada departments, agencies and Crown corporations. The TSB enters into transactions with these entities in the normal course of business and on normal trade terms. Also, during the year, the TSB received services which were obtained without charge from other Government departments as presented in part (a).

(a) Services provided without charge:

During the year the TSB received without charge from other departments, accommodation, administration of worker's compensation, the employer's contribution to health and dental insurance plans, and external audit services. These services without charge have been recognized in the TSB's Statement of Operations as follows with a corresponding amount in the Equity of Canada:

	2008	2007
	(in thousands of dollars)	
Accommodation	$ 1,937	$ 1,850
Employer's contribution to health and dental insurance plans	1,363	1,593
External audit services	78	60
Administration of worker's compensation	21	15
Total	**$ 3,399**	**$ 3,518**

The Government has structured some of its administrative activities for efficiency and cost-effectiveness purposes so that one department performs these on behalf of all without charge. The costs of these services, which include payroll and cheque issuance services provided by Public Works and Government Services Canada, are not included as an expense in the TSB's Statement of Operations given that a reasonable amount for those types of services cannot be determined.

(b) Payables outstanding at year-end with related parties:

	2008	2007
	(in thousands of dollars)	
Accounts payable to other government departments and agencies	$ 200	$ 197

(c) Administration of costs-shared activities.

The TSB was responsible for coordinating the financial management of funds for the networks of small federal agencies. The revenues consist of contributions from all agencies to the cost sharing. The expenses are the disbursements made on behalf of the group. Each government department will report its respective portion of expenses in its financial statements. During the year, TSB administered $311,500 in revenues ($370,000 in 2006-2007) and disbursed $16,751 in expenses ($338,000 in 2006-2007). Effective September 20, 2007, the TSB transferred this responsibility to Library and Archives Canada and the residual account balance of $294,749 was transferred to this organization.

10. Comparative Information

Comparative figures have been reclassified to conform to the current year's presentation.